

**Meeting Minutes**  
**Diversion Effects on Fishery Populations Team (DEFPT)**  
**May 20, 1998**  
**9:30 to 4:00pm**

**Schedule**

- ▶ New drafts of species team matrices and narratives to DEFPT..... May 29<sup>th</sup>
- ▶ Heads of species teams meet with small group (Ott, Chadwick, Herbold, Rhoads) to combine drafts into a issues and impacts paper(9:30-noon)..... June 3<sup>rd</sup>
- ▶ Draft issues and impact paper to DEFPT.....June 5<sup>th</sup>
- ▶ DEFPT two day work session to refine issues and paper, and to formulate questions for peer review(9:30-5:00)..... June 10<sup>th</sup> & 11<sup>th</sup>
- ▶ Refined Draft paper back to DEFPT for review..... June 15<sup>th</sup>
- ▶ DEFPT Meeting to finalize Draft..... June 25<sup>th</sup>
- ▶ Presentation to Management Team..... July 1<sup>st</sup>
- ▶ Paper to AFS peer review team.....July 2<sup>nd</sup>
- ▶ DEFPT meeting on to what extent can diversion effects be offset by modifications to the alternatives or by operational changes..... July 7<sup>th</sup>
- ▶ Presentation of issues and impacts paper to Policy Group.....July 14<sup>th</sup> & 15<sup>th</sup>
- ▶ Presentation to BDAC .....July 16<sup>th</sup>
- ▶ AFS peer review on issues and impacts paper to DEFPT..... July 24<sup>th</sup>
- ▶ Draft paper on modifications and operations..... Aug 15<sup>th</sup>
- ▶ Presentation to Management Team..... Sept 1<sup>st</sup>
- ▶ Presentation to BDAC ..... Sept 10<sup>th</sup>
- ▶ Presentation to Policy Group .....Sept 14<sup>th</sup> & 15<sup>th</sup>

## General

1. Each species team will suggest a target for "recovery" for their species for analysis purposes. Then the total DEFPT will review and make suggestions. If there is a difference of opinion may include analysis for both possibilities.
2. All teams may need a better definition of how other program components affect their species ( ERP, VAMP, etc).
3. For water quality effects on fisheries, we will request that Water Quality team develop a matrix that flags the impacts of biological significance by species, month for wet and dry years. Including the Sacramento and San Joaquin Rivers and Delta. DEFPT will develop the questions for the matrix to address.
4. The paper will be sent to the AFS peer review group as soon as the DEFPT approves. We will review with management the questions that we have ask the Peer group to address. Ron will alert AFS and send review materials (such as papers on the estuary).
5. Team needs better definition of the EPR to truly assess the impacts of the common programs. Ron check with Dick Daniel and see if there is a summary document on distribution of habitat that could effect the three species (where/when /how much?).
6. Need to determine what type of summary matrix we will put in text of paper.
7. Need to investigate other models outputs such as tidal fluctuations and practical tracking. It is important to factor in that we are working with averages that may mask some impacts.
8. Answer all questions listed in policy memo except number 4 (on modifications and operations).

## Salmon

1. Direct effects were weighted about 10 times indirect effects.
2. More fish are impacted by minium flows than by indirect impacts.
3. Weights were put on magnitude of importance of reverse flows (QWEST and South Delta).
4. Question: Do we have a broad enough spectrum of views of components of QWEST on the salmon team?
5. Minimum flows considered are located at Sacramento River is at Rio Vista and San Joaquin at Vernallis.
6. Value in "sum" column gives a feel of total effects of an impact area. Narrative will describe the monthly variances.
7. Need to evaluate how much we achieve "recovery". Need to factor in upstream and downstream effects to define true effects on populations.
8. What is the recovery goal for salmon? Is it populations large enough to remove species from ESA list? Or greater?
9. Should not use word "recovery". Should set target for what we are trying to achieve, and be clear in our narrative how we arrived at the target.

10. Need to keep in mind the limiting factors and address what we should do first to solve them.
11. Reverse flows were defined in central and northern Delta by QWEST and flow in Channels. In south Delta by the sphere of influence of the pumps.
12. Seems to be an inconsistency of flows in the San Joaquin River (March-April ) Vamp and the evaluation in the matrix and the narrative.
13. Need to clarify minimum flows verses reverse flows in narrative.
14. Need to clarify the size of fish impacted in diversion losses.
15. In San Joaquin matrix adults are included in values whereas in Sacramento matrix adults are a separate line item.
16. Need to clarify the term "delayed migration".
17. Need to clarify how we handled no storage and maximum storage.
18. Need to break out winter run.

### **Delta Smelt**

1. Need to break out components of hydrodynamics effects using model runs. (QWEST, Sac, S.J.).
2. Matrices have not been weighted.
3. Have observed that wet and dry years produce major differences in impacts.
4. "Totals" don't mean to much until weighted.
5. There has been some weighting built in for population location and timing.
6. Need more information from water quality team on when toxics affect fish live stages.
7. Salinity was derived from "X2".
8. Why are the outflows the same for all alternatives? Need to check with modelers.
9. Assumed that entrainment includes handling.
10. Need to check if the common ERP program includes consolidation and screening of Delta Ag diversions. May have given to much benefit to this impact.
11. Observation: The first appearance would indicate that common programs don't contribute much to diversion effects on populations. However, habitat, water quality, food supply all help a little. Need to be careful on our presentation of conclusions.
12. Shallow water habitat only benefits spawning. Not sure how important spawning is in Delta for populations.
13. Need to consider "exotics" in analysis. Some have handled it in food supply.

### **Striped Bass**

1. Entrainment values include all components of entrainment.
2. Did all weighting after independent values were decided.
3. Need a good understanding of ERP common program, shallow water habitat and marshes.
4. Will change the matrices after operational runs.